

WHAT IS CLAIMED:

1. A distal tip electrode adapted for implantation on or about the heart and for connection to a system for monitoring or stimulating cardiac activity, said electrode comprising:

- an electrode tip;
- a mesh screen disposed at a distal end of the electrode tip;
- a surface at the distal end of the electrode tip;
- a fixation device disposed within said electrode, said fixation device adapted for travel along radial axis of the electrode through said surface;
- a guiding mechanism for directing movement of the fixation device during travel; and
- a movement assembly, said movement assembly for providing movement to said fixation device.

2. The distal tip electrode as recited in claim 1, wherein said fixation device comprises a helix.

3. The distal tip electrode as recited in claim 1, wherein said movement assembly comprises a piston.

4. The distal tip electrode as recited in claim 3, wherein the piston has a slot therein, and the base further comprises a knob, said slot for mating with said knob.

5. The distal tip electrode as recited in claim 3, wherein the slot is mated with said knob to form a stop mechanism for said fixation device.

6. The distal tip electrode as recited in claim 1, wherein the mesh screen has a groove guide disposed therein.
7. The distal tip electrode as recited in claim 3, wherein said distal tip electrode further comprises a seal, said seal disposed between said piston and said base.